

Pollution Prevention Technology Diffusion Initiative

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Although pollution prevention (P2) technologies save money and help prevent the release of toxic and hazardous wastes into the environment, many companies are reluctant to install new equipment or change the current processes. Some of the reluctance is initiated by lack of time and money to try new methodologies, but, in many cases, the problem is “change.” The primary goal of this project is to document barriers to implementation of proven innovative P2 technologies and how those barriers are overcome.

Congressionally directed funding through the ORD is supporting a technology diffusion pilot program in two regions and three state university programs. The University of Illinois’ Waste Management and Research Center at Champaign-Urbana, IL, the University of Minnesota’s Minnesota Technical Assistance Program (MNTAP) in Minneapolis, MN, and the University of Louisville’s Kentucky Pollution Prevention Center in Louisville, KY, are conducting this project to accelerate the adoption of proven pollution-prevention technologies in the sectors of metal finishing (plating), printed wiring boards (PWB), coating and painting, and fiber-reinforced plastics (FRP). The three programs will share sector-specific expertise developed by the individual programs.

The five major factors detailing why a proven technology is not implemented that comprise the Technology Diffusion Initiative (TDI) approach are (1) perceived advantages are inadequate or uncertain, (2) perceived incompatibilities of new technology with current processes and operations, (3) perceived complexities of the new technology, (4) inability to observe technology in operation, and (5) lack of technical resources to conduct a pilot test.

The approach involves change agents, P2 technical assistance providers (TAPs) from the three states, implementing the technology diffusion approach by addressing these five factors, and promoting the use of innovative P2 technologies. Sector-specific stakeholder meetings will be convened to discuss the processes’ problems and solutions. Champions will be identified and will become pilots for demonstrations of chosen technologies. The TAPs will assist in

performing gap audits and identifying areas for installation of pilot technologies in companies that agree to the program's requirements.

The information developed during this pilot project will be collected and analyzed and a report will be published to share the experiences in the addressed sectors. This information will assist other TAPs in promoting P2 technologies using this approach in overcoming the major perceived barriers in adopting new pollution-prevention technologies. The diffusion of P2 technologies throughout industry is a major step toward sustainability of our resources and habitats.